


IN THE CLAIMS:

Please amend Claims 1-35 and 37-56 as follows (a complete listing of all the claims appears below):

 Claim 1 (currently amended): ~~Method~~ Communication method of

 communicating digital information ~~over at least one~~ of different data formats via a plurality of communication medium (100, 401, 402) channels shared between several communication means (101 to 106), all said media using the same communication protocol and being physically identical, characterised in that it includes, wherein the method comprises:

- a first operation of transmitting, by a first communication means, said information to be transmitted, having a first format, on a first medium;

- an a reception operation of receiving transmitted digital information having the a first format, by a second communication means, transmitted via a first communication channel from communication means that uses the first format;

- an a reformat operation of reformatting the received digital information having the first format, ~~in order to give it to~~ digital information having a second format different from the first format, ~~effected by the second communication means;~~ if resources to use a second channel for transmission of digital information having the second format are available; and

- a second transmission operation of transmitting, by said second communication means, said the digital information having the second format, ~~on a~~ via the second medium channel, wherein the digital information having the second format and transmitted via

the second channel is received by communication means that uses the second format.

Claim 2 (currently amended): Communication method according to Claim 1, characterised in that, following any initialisation operation, ~~said reformatting~~ the reformat operation is effected on any information having ~~said~~ the first format.

135 Cl 3 cont.
Claim 3 (currently amended): Communication method according to either one of Claims 1 or 2, characterised in that ~~it includes an~~ the method further comprises a determination operation (903) of determining ~~the~~ a need to reformat received digital information having the first format and, when reformatting is necessary, ~~said reformatting~~ the reformat operation and ~~said~~ the transmission operation are performed on ~~said~~ the received digital information.

Claim 4 (currently amended): Communication method according to Claim 3, characterised in that ~~said necessity~~ the determination operation (903) takes into account any destination address of ~~said received data~~ the received digital information.

Claim 5 (currently amended): Communication method according to Claim 3, characterised in that ~~said necessity~~ the determination operation (903) takes into account a transmission channel identifier used during ~~the first transmission operation~~ of the digital information via the first communication channel.

Claim 6 (currently amended): Communication method according to Claim 3, characterised in that ~~said necessity~~ the determination operation (903) takes into account ~~the a~~ bandwidth to be used during the ~~second~~ transmission operation.

Claim 7 (currently amended): Communication method according to Claim 3, characterised in that, ~~the second communication means being~~ the reformat operation is adapted to reformat at least two received information formats, ~~said necessity~~ and the determination operation (903) takes into account the first format of the received digital information.

Claim 8 (currently amended): Communication method according to any one of Claims 1 and 2, characterised in that ~~it includes an~~ the method further comprises a stoppage operation of stopping reformatting (911) ~~and in that, such that~~ following ~~said the~~ stoppage operation, ~~the reformatting the reformat~~ operation is no longer performed on the received ~~data~~ digital data having the first format.

Claim 9 (currently amended): Communication method according to any one of Claims 1 and 2, characterised in that, after any information reception operation, ~~it includes an~~ the method further comprises a detection operation of detecting the first format (903) and, when the first format is detected, ~~said reformatting the reformat~~ operation is performed on any information having the first format.

Claim 10 (currently amended): Communication method according to any one of Claims 1 and 2, characterised in that the first communication ~~medium~~ channel and the second communication ~~medium~~ channel are merged.

Claim 11 (currently amended): Communication method according to any one of Claims 1 and 2, characterised in that the first communication ~~medium~~ channel and the second communication ~~medium~~ channel are not merged.

3/5 Cont.
Claim 12 (currently amended): Communication method according to Claim 3, characterised in that ~~it includes~~ the method further comprises an isolation operation of isolating flows between two buses.

Claim 13 (currently amended): Communication method according to any one of Claims 1 and 2, characterised in that ~~one of the transmission operations is performed in~~

if the digital information having the first format is transmitted in an isochronous and the other in mode, the digital information having the second format is transmitted in asynchronous mode, and

if the digital information having the first format is transmitted in the asynchronous mode, the digital information having the second formation is transmitted in the isochronous mode.

Claim 14 (currently amended): Communication method according to any one of Claims 1 and 2, characterised in that it includes the method further comprises a transmission resource allocation operation (904) of allocating a transmission resource for at least one transmission operation ~~on the communication medium concerned.~~

Claim 15 (currently amended): Communication method according to Claim 14, characterised in that it includes the method further comprises a bandwidth reservation operation (904) of reserving a bandwidth for at least one transmission operation.

Claim 16 (currently amended): Communication method according to any one of Claims 1 and 2, characterised in that, during at least one transmission operation, it is ~~determined~~ a determination is made as to whether, at the a moment of sending, there is a sufficient resource and, ~~in the~~ if affirmative, sending is effected and, if not, ~~it is considered that~~ the information to be transmitted sent is considered to be lost.

Claim 17 (currently amended): Device for communicating digital information ~~over at least one~~ of different data formats via a plurality of communication medium (100, 401, 402) ~~shared~~ channels between several communication means (101 to 106), ~~all said media using the same communication protocol and being physically identical, characterised in that it has a,~~ wherein the device comprises communication means (107, 108, 409, 509) which that:

- ~~has a~~ includes means ~~of for~~ receiving digital information (309) having a first

format transmitted ~~over~~ via a first ~~medium~~ by communication channel from a first
communication means ~~and having that~~ uses the first format,

- ~~is adapted to reformat~~ includes means for reformatting the received digital
information having the first format, ~~in order to give it to~~ digital information having a second
format different from the first format, if resources to use a second channel for transmission of
digital information having the second format are available, and

- is adapted to perform a transmission operation to transmit ~~said~~ the digital
information having the second format, ~~over a~~ via the second medium channel, wherein the digital
information having the second format and transmitted via the second channel is received by
another communication means, which uses the second format.

Claim 18 (currently amended): Communication device according to Claim 17,
characterised in that the communication means is adapted, following any initialisation, to
reformat any information having ~~said~~ the first format and to transmit the reformatted information
having the ~~corresponding~~ second format.

Claim 19 (currently amended): Communication device according to either one
of Claims 17 or 18, characterised in that ~~it has a means of the device~~ further comprises
determination means for determining the a necessity of reformatting received digital information
having the first format and, when ~~said~~ the determination means determines that reformatting is
necessary, the communication means ~~is adapted to perform the~~ performs reformatting of ~~said~~ the

received digital information.

Claim 20 (currently amended): Communication device according to Claim 19, characterised in that the necessity determination means is adapted to take into account any destination address of ~~said~~ the received data ~~in order to determine said necessity~~ digital information.

Cl
B/S cont.
Claim 21 (currently amended): Communication device according to Claim 19, characterised in that the necessity determination means is adapted to take into account a transmission channel identifier used during ~~the first transmission operation, in order to determine~~ said necessity of the digital information via the first communication channel.

Claim 22 (currently amended): Communication device according to Claim 19, characterised in that the necessity determination means is adapted to take into account ~~the a~~ a bandwidth to be used during the ~~second transmission operation, in order to determine said~~ necessity.

Claim 23 (currently amended): Communication device according to Claim 19, characterised in that the ~~second~~ communication means is adapted to reformat at least two received information formats, and in that the necessity determination means takes into account the first format of the received information, ~~in order to determine said necessity~~.

Claim 24 (currently amended): Communication device according to any one of Claims 17 and 18, characterised in that ~~it includes a~~ the device further comprises reformatting stoppage means ~~and in that, following the functioning of the stoppage means, such that after stopping a reformatting operation~~ the communication means transmits no further information having the second format.

Claim 25 (amended): Communication device according to any one of Claims 17 and 18, characterised in that ~~it has a~~ the device further comprises detection means of for detecting ~~the first format adapted, on reception of information, to determine whether said information has the first format and, in the affirmative when the first format is detected,~~ the communication means is adapted to reformat any information having the first format.

Claim 26 (currently amended): Communication device according to any one of Claims 17 and 18, characterised in that each communication ~~medium is in accordance with~~ standard channel conforms with an IEEE 1394 standard.

Claim 27 (currently amended): Communication device according to any one of Claims 17 and 18, characterised in that the first communication ~~medium~~ channel and the second communication ~~medium~~ channel are merged.

Claim 28 (currently amended): Communication device according to any one of

Claims 17 and 18, characterised in that the first communication ~~medium~~ channel and the second communication ~~medium~~ channel are not merged.

Claim 29 (currently amended): Communication device according to Claim 28, characterised in that ~~it has~~ the device further comprises an interbus bridge ~~complying, for example, with the standard~~ that conforms with an IEEE 1394.1 standard.

10 Cl Cont.
Claim 30 (currently amended): Communication device according to Claim 28, characterised in that the communication means is adapted to isolate ~~the~~ flows between the ~~two~~ first and second communication ~~media~~ channels and to cause peripherals connected to ~~these~~ the first and second communication ~~media~~ channels to communicate.

Claim 31 (currently amended): Communication device according to any one of Claims 17 and 18, characterised in that the communication means is adapted to perform operations of transmission ~~and/or~~ and reception in an isochronous mode ~~on the one hand~~ and in an asynchronous mode ~~on the other hand~~.

Claim 32 (currently amended): Communication device according to any one of Claims 17 and 18, characterised in that ~~it has a~~ the device further comprises transmission resources allocation means adapted to allocate transmission resources for at least one transmission operation ~~over the communication medium concerned~~.

Claim 33 (currently amended): Communication device according to Claim 32, characterised in that it has a further comprising bandwidth reservation means for reserving a bandwidth for at least one information transmission.

Claim 34 (currently amended): Communication device according to any one of Claims 17 and 18, characterised in that the communication means is adapted to determine whether, at ~~the~~ a time of sending information, there is a sufficient resource and, ~~in the if~~ affirmative, sending is carried out and, if not, ~~to consider that the information to be transmitted is~~ sent is considered to be lost.

Claim 35 (currently amended): Communication device according to any one of Claims 17 and 18, characterised in that the communication means is adapted to process, in parallel, ~~several~~ at least two information flows.

Claim 36 (previously amended): Communication device according to any one of Claims 17 and 18, characterised in that the communication means is adapted to process flows bidirectionally.

Claim 37 (currently amended): Communication device according to any one of Claims 17 and 18, characterised in that the communication means is adapted so that one of the first and second formats complies with ~~the~~ a "DIGITAL VIDEO" standard.

Claim 38 (currently amended): Communication device according to any one of Claims 17 and 18, characterised in that the communication means is adapted so that one of the first and second formats complies with ~~the standard~~ a "JPEG 2000" standard.

Claim 39 (currently amended): Communication device according to any one of Claims 17 and 18, characterised in that the communication means is adapted so that one of the first and second formats complies with ~~the standard~~ a "MPEG2" standard.

Claim 40 (currently amended): Network, characterised in that ~~it has the~~ network comprises a communication device according to any one of Claims 17 and 18.

Claim 41 (currently amended): Computer, characterised in that ~~it has the~~ computer comprises a communication device according to any one of Claims 17 and 18.

Claim 42 (currently amended): Camera, characterised in that ~~it has the camera~~ comprises a communication device according to any one of Claims 17 and 18.

Claim 43 (currently amended): Facsimile machine, characterised in that ~~it has~~ the facsimile machine comprises a communication device according to any one of Claims 17 and 18.

Claim 44 (currently amended): Copier, characterised in that it ~~has~~ the copier comprises a communication device according to any one of Claims 17 and 18.

Claim 45 (currently amended): Printer, characterised in that it ~~has~~ the printer comprises a communication device according to any one of Claims 17 and 18.

Claim 46 (currently amended): Camcorder, characterised in that it ~~has~~ the camcorder comprises a communication device according to any one of Claims 17 and 18.

Claim 47 (currently amended): Video recorder, characterised in that it ~~has~~ the video recorder comprises a communication device according to any one of Claims 17 and 18.

Claim 48 (currently amended): Display ~~means~~ device, characterised in that it ~~has~~ the display device comprises a communication device according to any one of Claims 17 and 18.

Claim 49 (currently amended): Modem, characterised in that it ~~has~~ the modem comprises a communication device according to any one of Claims 17 and 18.

Claim 50 (currently amended): Television receiver, characterised in that it ~~has~~ the television receiver comprises a communication device according to any one of Claims 17 and 18.

18.

Claim 51 (currently amended): Mass memory, characterised in that ~~it has~~ the mass memory comprises a communication device according to any one of Claims 17 and 18.

Claim 52 (currently amended): Scanner, characterised in that ~~it has~~ the scanner comprises a communication device according to any one of Claims 17 and 18.

Claim 53 (currently amended): Photographic apparatus, characterised in that it ~~has~~ the photographic apparatus comprises a communication device according to any one of Claims 17 and 18.

Claim 54 (currently amended): Information storage ~~means~~ device, which ~~can be read~~ is readable by a computer or a microprocessor storing instructions of a computer program, characterized in that it the information storage device allows implementation of the communication method according to any one of Claims 1 and 2.

Claim 55 (currently amended): Information storage ~~means~~ device, which is removable, partially or completely, and ~~can be read~~ is readable by a computer or a microprocessor storing instructions of a computer program, characterized in that it the information storage device allows implementation of the communication method according to

any one of Claims 1 and 2.

Cont.
BS

Claim 56 (currently amended): ~~Information storage means which can be read~~
~~by a computer or microprocessor storing information, characterized in that said information are~~
~~issued from the implementation of Computer program product embodying a computer program~~
~~for implementing the communication method according to any one of Claims 1 and 2.~~
